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## **Territory-centred thinking and action for a better future: territorial foresight in the regions of Ségou in Mali and Vakinankaratra in Madagascar**

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This chapter presents the principles and perspectives of foresight approaches in sub-Saharan Africa, positioned at the level of sub-national territories rather than at the national and international levels. We refer here to large administrative regions, products of a social and political structure that sometimes goes back many decades. For this historical reason, these regions do not always correspond to the characteristics of territories as defined in this book (see Chapter 1), but have been directly targeted by the devolution policies of State services and the decentralization that have been implemented, often in an incomplete manner, over the last three decades. In this chapter, we intend to offer generic analyses, based on two recent studies in the region of Ségou (Mali) and Vakinankaratra (Madagascar).

### **A NEED FOR TERRITORY AND FORESIGHT**

The first part of this book shows the pertinence of territorial approaches in identifying new levers of development. To illustrate one of the aspects of accompaniment of the territory, as described in Chapter 31, this chapter presents one example of a broader framework of institutional and political recognition of specific territorial issues in sub-Saharan Africa (see, in particular, AfDB, OECD, UNDP, 2015; Pesche *et al.*, 2016).

Sub-Saharan Africa, despite experiencing a period of strong and significant – albeit unevenly distributed – growth, has not witnessed the economic boom predicted in the 2000s. The effectiveness of the emergence of African economies, whose primarily sectoral translations feature in numerous national dialogues, is being widely debated today (Magrin, 2015). It should be noted that public policies in recent decades have



shown their inability to trigger a process of sustainable development and structural transformation through the diversification of economies beyond the boundaries of capital cities (AfDB, OECD, UNDP, 2015). Poverty rates remain among the highest in the world (41% of the population live below the income threshold of USD 1.25 PPP<sup>1</sup> per day) with large territorial disparities, including a significantly higher concentration of poverty in rural areas. The Sustainable Development Goal no. 10 on inequalities includes the following target: 'by 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average'<sup>2</sup>. Achieving this SDG will require both targeted interventions in the marginalized and fragile rural territories where the targeted population often lives, and innovations in defining and implementing public policies.

The sub-continent faces a demographic challenge of overwhelming magnitude. The projected doubling of the African population by 2050, with 2.1 billion expected total inhabitants on the continent, more than half of whom will be under 25 years old<sup>3</sup>, calls for serious reflection on development models that can respond to issues of youth employment, productivity and food. Sub-Saharan Africa, with the exception of a few countries, will be unable to benefit, at least for several decades, from the demographic dividend<sup>4</sup>, historically recognized as a lever for economic emergence. Furthermore, the high proportion of the agricultural population in the active workforce (60% on an average), weak employment opportunities in the secondary and tertiary sectors, and the fact that the so-called rural population will continue to grow beyond 2050 constitute an unprecedented and seemingly insurmountable set of challenges.

Therefore, a true structural transformation in Africa cannot be achieved by replicating existing development models. The challenges identified call for a revamping of public policies using multi-sectoral approaches with a territorial scope to address a demographic urgency and its consequences on employment and pressure on local resources. In a context in which institutions born of decentralization are struggling to function and public levers of development have been scaled back considerably, one of the challenges is to get local actors to step forward, take control and determine their future. Territorial foresight offers perspectives to meet this challenge.

## **TERRITORIAL FORESIGHT IN LOCAL STRATEGIC REFLECTION**

Research and expertise that incorporate consideration of the future in decision-making processes encompass a wide diversity of approaches, methods and tools (EFMN, 2009). This diversity extends from the domains of forecasting and projection, based

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1. Purchasing power parity (PPP) is a currency conversion rate that allows the purchasing power of different currencies to be expressed in a common unit. This rate expresses the ratio of the quantity of monetary units required in different countries to purchase the same 'basket' of goods and services. See <http://www.insee.fr/fr/methodes/> (retrieved 23 April 2017).

2. <http://www.un.org/sustainabledevelopment/inequality/> (retrieved 23 April 2017).

3. UNO, World Population Prospects, updated in 2015.

4. The demographic dividend corresponds to the economic advantage that can be obtained from the relative decrease in inactive populations in the age pyramids following a rapid demographic transition. It is characterized by a leverage effect caused by the high productivity of societies that have a reduced need to allocate resources for the care of children and the elderly.



on rather quantitative methods, to domains of anticipation and exploration, based on relatively qualitative approaches. Foresight approaches, which are constantly evolving, often bring together the tools and methods from both forecasting and anticipation.

The approach implemented here can be defined as a 'reflection to explain the present action in the light of possible and desired future scenarios' (Godet and Durance, 2011). It consists of the co-development of exploratory scenarios by actors who are directly concerned.<sup>5</sup> It is found at the intersection of three types of foresight: strategic, participative and transformative (UNDP, 2015). Its relevance and effectiveness stem from the combination of two approaches: the creation of multi-sectoral and multi-dimensional knowledge which helps better explain change factors that impact the territory's functioning, and the participation of diverse range of actors who enable the transition from a multitude of individual representations to a collective appropriation of the issues.

This approach is based on a reflection that identifies and differentiates exogenous forces and trends over which local actors have little or no control, and local forces and rifts that these same actors can control or influence. The latter are at the heart of the territorial action that inserts local actors into decision-making processes and action courses in order to influence their development trajectories. Applied to the regions of Ségou and Vakinankaratra, it opens a range of possible futures to help reconcile the long-term challenges of development with territorial resources and local margins for manoeuvre. It allows these territories' actors, who may feel helpless in the face of changes at a global or national scale, to retake, at least to some extent, control of their future, by using the future to change the present to change the future. We are thus referring here to actionable territorialized foresight.

## **MATCHING AND COMBINING VIEWPOINTS TO IMAGINE POSSIBLE FUTURES AND THINK THE PRESENT**

The methodological construction presented here is the result of a journey from a request for expertise to a finalized research programme for facilitating local public decision-making. Based on the specifics of the African context mentioned above, the hypothesis that guided the request for expertise was that the continent's demographics – in terms of spatial distribution as well as in the number of individuals and the age structure – are exhibiting an important trend that will have a marked impact on the future of African rural territories. The initial methodological proposal sought to break down future demographic challenges to the local level in order to predict their impacts on the labour market, needs for basic services and natural resources, as part of a foresight reflection on the future of these territories in the medium term. Subsequently, the proposal took on a broader strategic dimension

5. The participatory methodology used is described in the respective reports (in French) of the workshops conducted in Ségou and Vakinankaratra. They are available online at: <http://www.afd.fr/webdav/site/afd/shared/PRESSE/Evenements/Rapport%20d%27atelier%20les%20avenirs%20de%20Segou%202035%20final.pdf> and <http://www.afd.fr/webdav/site/afd/shared/PRESSE/Evenements/Rapport%20d%27atelier%20les%20avenirs%20de%20Vakinankaratra%202035%20final.pdf> (retrieved 24 April 2017).



by being enriched with complementary and more predictive approaches, as well as with long-term territorial diagnoses that highlighted the trajectories of the territories studied and the challenges they will have to face. Finally, and especially in the countries concerned, the statistical systems available are of little help in describing correctly the informal sector, the concrete realities of living conditions and, above all, the representations of households. It thus became necessary to carry out a survey to collect first-hand data that could contextualize secondary data provided by national and international institutions.

The studies, from diagnosis to exploratory foresight, and thence to strategic foresight, have thus combined various disciplines and approaches, conducted jointly and organized into four major blocks:

- a retrospective diagnosis that integrates and leverages secondary data produced by national statistical entities, analyses of pre-existing diagnoses, as well as lessons from major socio-economic surveys that are conducted regularly;
- open interviews with key people and surveys<sup>6</sup> covering 500 individuals in each region, to gather additional information on demographic processes and activities, and on the territory's representation and its functioning;
- regional demographic projections, based on original fertility and mortality assumptions, generated within the framework of the study using data, where available, from a recent census and from the United Nations; these projections reveal the challenges to be encountered at time horizons of 2035 and 2050, and help assess impacts of population growth on needs of employment, agricultural land, education and health;
- finally, a more comprehensive projection into the future that identifies the territorial forces of change, undertaken in a participatory manner with a group of experts in the concerned territories, in reference to the previous stages, and which helps develop various likely development scenarios.

## **THE REGIONS OF SÉGOU IN MALI AND VAKINANKARATRA IN MADAGASCAR IN 20 YEARS: WHAT LESSONS CAN BE DRAWN?**

### **The diagnosis: urbanization, mobilities, weightage of the informal sector and primary specialization**

The studies relativize the magnitude of urbanization. Observed at the regional level, the process shows that a strategic focus on the city would be misplaced. While population growth is greater in urban centres than in rural areas, the predominant role of national capitals in the process is decisive. Rural areas in both these regions are becoming more densely populous and secondary cities are struggling to emerge as economic hubs. Moreover, the observed urban configuration challenges the validity of agglomerates created by the major boroughs and their areas of direct influence (their hinterlands) as territories for action and development. This finding suggests that

6. Quantitative and qualitative surveys using both closed and open questions. Direct surveys of a large number of households were preferred to focus groups in order to capture variability and avoid a partial and possibly standardized representation of the actual reality.



researchers should consider larger areas which have also seen an increase in population density. Finally, many households categorized as urban in various statistics are engaged in agriculture and practice partially rural lifestyles.

Mobilities, especially sub-regional, often over short distances and seasonal, appear to be fundamental to the actors' practices and the structuring of territories. They result from economic and social needs and further blur the distinction between urban and rural categories. They partially challenge the very notion of the rural exodus, which is still regularly advanced as a significant element in regional and, especially, national diagnoses. Mobility constitutes a potential wealth, a territorial asset that deserves to be known, better understood and leveraged by appropriate policies.

Regional economies rely mainly on the informal sector: family farming in which systems of activities that include activities from other sectors (services, handicrafts, trade, etc.) and small urban professions dominate. Consequently, raising resources through local taxation poses a challenge since formal employment accounts for less than 3% of the working population. Economic diversification, as measured by the distribution of jobs, remains severely limited. Agriculture remains predominant but with low labour productivity. Sectoral policies affect only a small part of the active population. Vakinankaratra is known to be an industrial region (especially in the textile and agri-food sectors), where efforts to improve infrastructure have so far focused on public goods usable by industry (electricity, airports and freight, access to water), while the agricultural and rural sectors, home to the bulk of the working population, finally end up with reduced allocation of resources.

## **Demographic projections: the regional level reflects the continental challenge**

Population projections for 2035 predict an increase, over 2015 levels, of 2.5 to 4.2 million people in Ségou and of 2 to 3.1 million in Vakinankaratra. The associated educational and health needs are likely to be ill met by the limited availability of resources. It seems unrealistic to expect these regions to conform to UNICEF and WHO standards by the year 2035, since that would entail providing education to more than 550,000 students, and training over 1,750 health workers in Ségou, with the respective figures being 350,000 and 1,000 for Vakinankaratra. These figures translate into an almost 50% increase in what has been achieved – often with very poor quality – over the last two decades. Furthermore, due to the inadequacy of public allocations, well below necessary levels, competition exists between social investments and investments that have an economic scope, resulting in trade-offs that always turn out to be detrimental to comprehensive strategic thinking, as they often expediently favour short term goals.

The projected increase in rural population densities and requirements of agricultural land is also likely to increase the already high stress on land tenure and natural resources, especially in Vakinankaratra. The growth in population has been accompanied by an expansion of cultivated lands and pastures with little or no gain in productivity, except in localized areas that were favoured by public policies and projects (most notably the irrigated areas in the Ségou region). There is a lack of



data on the availability of land for sustaining such an approach, but the estimated needs for additional land, assuming constant productivity and similar farm structures (almost 100,000 hectares in Vakinankaratra and more than one million hectares in Ségou by 2035), exhorts us to anticipate great changes in production systems<sup>7</sup> and increased competition between conservation and exploitation. Finally, the cumulative employment requirements over 20 years will amount to 1,000,000 jobs in Ségou and 700,000 jobs in Vakinankaratra, corresponding to an employment generation rate that is double of that estimated for the last two decades. It is also worth noting that current employment structures have very little diversity.

### **The exploration of likely futures: drawing up of exploratory scenarios**

The results of the surveys and participatory workshops have led to a better understanding of the representations of local actors. Issues pertaining to the security of goods and people emerged as important from discussions held with the respondents. In Ségou, these concerns arise from the ongoing political and religious tensions, emblematic of the current jihadist threats on the continent. In Vakinankaratra, on the other hand, the apprehensions are the result of the menace of bandits and delinquency. Closely linked to security issues, the inadequate public investments in markets and services, as also the mixed records of institutions responsible for implementing decentralization, are of far greater concern. Furthermore, they are the cause of the disenchantment of the populace and officials.

Despite the alarmist nature of population projections, individuals surveyed – especially in the Ségou region in Mali – were in favour of the security and strength that a large family provides in an uncertain environment. The ideal number of children desired per woman remains higher than four, a sign that a demographic transition could take much longer than expected.

In both regions, agriculture is currently in the limelight, with a focus on agrifood and industrialization perspectives, including of production, although respondents do not envisage a sudden acceleration of economic diversification. Migration (especially to the capitals) and an exit from the agricultural sector are commonly seen as the main alternatives to agricultural pursuits. The results of the surveys showed contrasting perceptions between Vakinankaratra and Ségou. In the former, a large majority of young people interviewed imagined their future primarily in their region and in family farming. It was the opposite case in Ségou, where a majority of the young people envisaged their future elsewhere, especially in the capital, but also in foreign countries. Thus representations of the future seem to be complex and are sometimes out of sync with policy orientations focused on agribusiness and industrialization.

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7. The intensification of agricultural production is a historical response to increases in population density. The fact that the density thresholds have not yet been reached would explain the low agricultural labour productivity in sub-Saharan Africa. However, in addition to the uncertainty over the measurement of these thresholds and the rapidity with which it should take place, intensification is a real challenge. Farm managers and owners who will likely have to make the transition are probably already born and the investment capacity to increase productive capacity is low.



Workshops on participatory foresight validated bibliographic analyses and the surveys, while introducing an additional dimension based on participants' experiences. The identification and definition of variables that most influence the territory's possible futures, using which the scenarios were formulated, are presented in Table 37.1. They highlight the diversity of the dimensions of development, the foremost of them being security and governance. Although they are immutable key variables, they are often overlooked by decision-makers and often enough by the rest of the stakeholders.

**Table 37.1.** Key variables identified in the two regions.

Key variables identified in the two regions	
Ségou region	Vakinankaratra region
Security	Security
Mining potential	Access to energy
Communication infrastructure	Demographic pressure
Weightage of the informal sector	Capacity for economic organization
Access to energy	Financing local development
Orientation of local development	Socio-economic structuring, structural inequalities
Public funding	Poverty
Territorial governance	Marketing opportunities

The capacity of national and regional administrators to invest in the territories (mainly energy, accessibility) and to provide local strategic directions in line with the economic environment appears to be a major cause for bifurcations of the trajectories. Otherwise, there is a risk of a falling back on a fragmented self-reliance and self-organization.

The scenarios highlight the fact that without a strong and articulated response at the local and national level, territorial resources of these two regions will not help reduce poverty or the vulnerability of their peoples in view of population projections and past trajectories. This necessitates a revamping of public policies, which should henceforth be based on concerted strategies for territorial development. The derivation of value from its resources should rely on an improved knowledge of their availability (especially land), and on a better understanding of their local uses in the long term.

Two future scenarios<sup>8</sup> are presented schematically below as examples. The one chosen for Ségou illustrates an endogenous strategy based on exploiting the potential of regional territories and their own tangible and intangible resources in response to demographic challenges and income diversification. The development of modest but diversified economic structures depends on improved local governance, especially as concerns redistribution. The scenario selected for Vakinankaratra not only reflects concerns for the safety of goods and people in the territories and its possible impacts, but also for widening inequalities. The territorial segmentation induced further aggravates management capacities, especially of managing the demographic issue.

8. All sixteen scenarios discussed can be consulted in the study's summary documents (Sourisseau *et al.*, 2016).

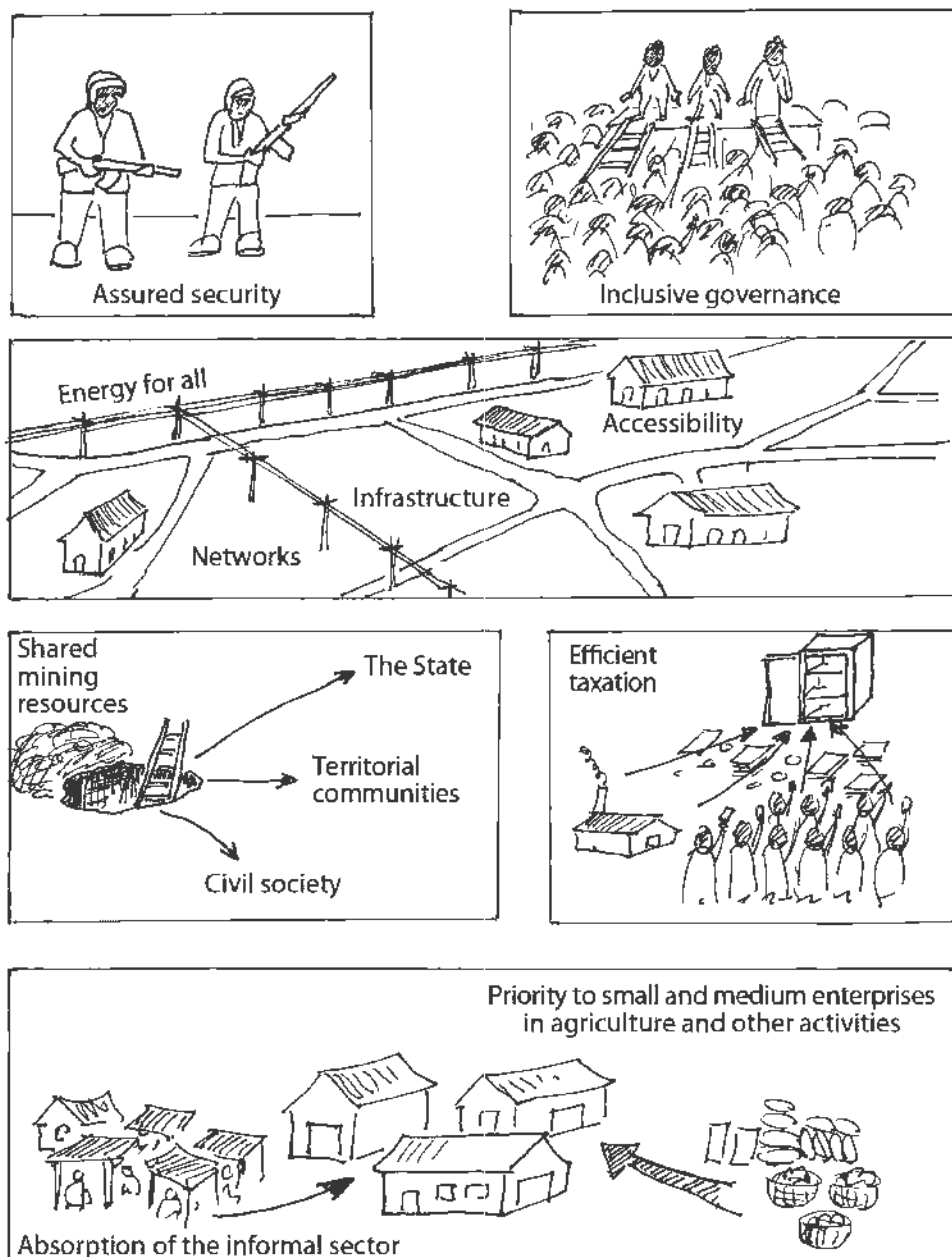


## SOME SUGGESTED ORIENTATIONS FOR PUBLIC ACTION AT THE CONCLUSION OF THIS EXERCISE: THE EXAMPLE OF AGRICULTURE

The work carried out allows stakeholders to identify a number of strategies and actions to achieve the desired future(s). Since the agricultural sector represents a key solution for the future of these two regions, the reflections resulting from this exercise are presented here for illustrative purposes.

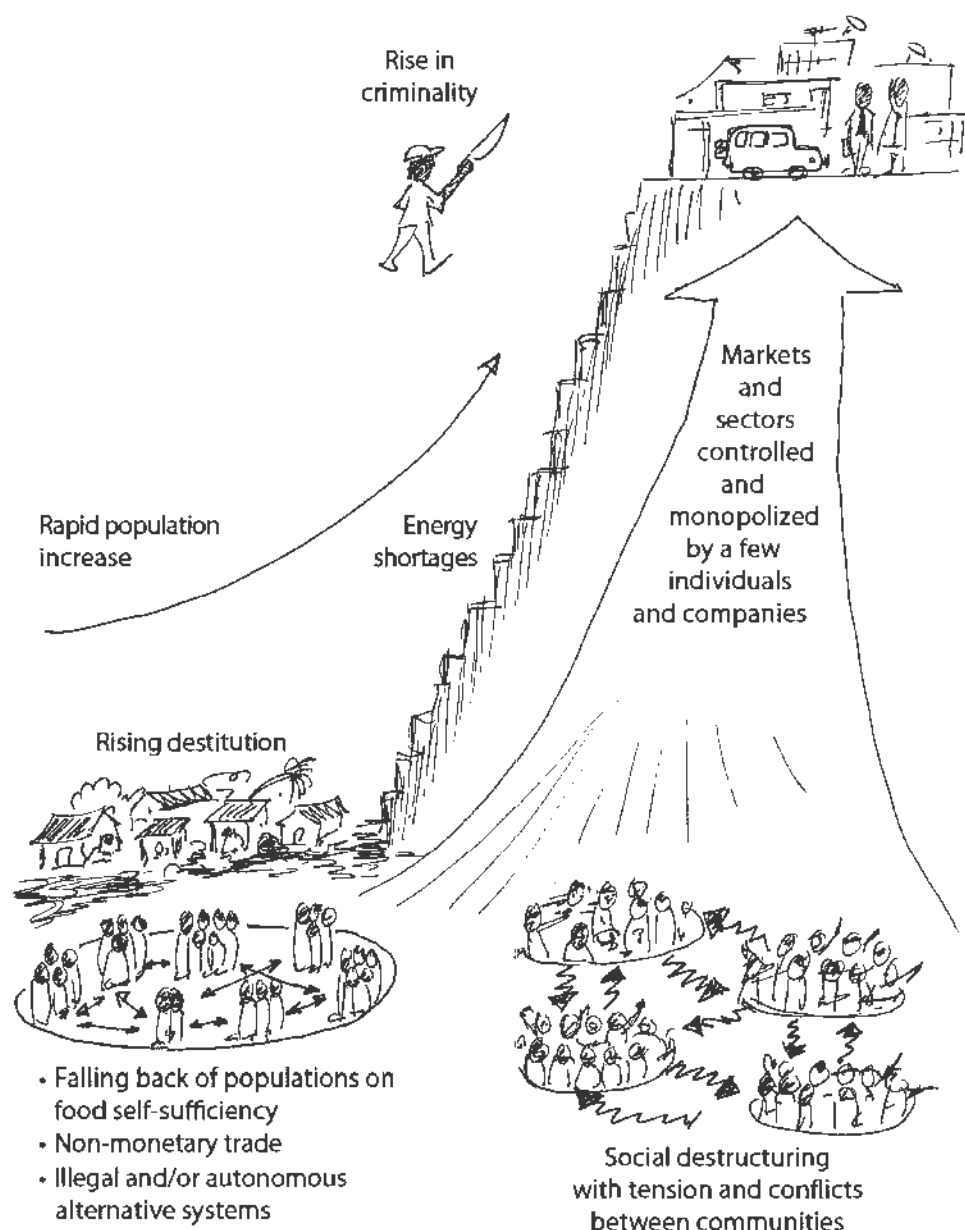
To build an agricultural model that offers decent jobs and acts as an engine of multi-sectoral development, it is necessary to complement the historical production objective of agricultural policies – essential to achieving food and nutrition targets – by adding other dimensions of environmental and social sustainability. To this end,

### 1. Long live Segou, small and family are beautiful...





## 2. Community conflicts



**Figure 37.1.** Illustration of two of the sixteen scenarios developed.

1. The scenario in the Ségou region © J. Mercoiret.
2. The scenario in the Vakinankaratra region © J. Mercoiret.

perspectives of a family-based and labour-intensive agroecology that can increase economic and social performance, both in the production segment and all along the food systems, merits further exploration. At the current time, such an orientation offers greater guarantees of employment and economic diversification than agribusinesses and concentrated food systems. It is important to strengthen the link between agriculture and upstream and downstream activities, between cities and the countryside. This presupposes a willingness to rebalance rural settlements, secondary towns and regional capitals that provide services and infrastructures to help diversify activities and jobs.



In addition, this study calls for a rethinking of the rationales of decentralization, not only through a strengthening of local capacities of management, organization and strategic construction, but also through a recasting of national development organizations (agriculture is a good example here, too) which would allow a freer and more effective expression of regional preoccupations.

## **THE PERSPECTIVES FOR TERRITORIAL FORESIGHT APPROACHES IN SUB-SAHARAN AFRICA**

This experimental method, which is neither prescriptive nor normative, combines information of different origins and types to arrive at a combination of useful perspectives to avoid the imposition of purely sectoral approaches on regions. The participatory dimension of the exercise of projecting into the future and the resulting collective dynamics appear to be veritable assets to give a voice to actors who are rarely heard (not only some category of representatives of civil society, numerous young people and marginalized populations, but also dissenting voices within development administrations). They facilitate a common understanding of regional challenges and of the capacity of local resources to respond to them. The collective workshops highlighted the lack of communication and of the synergies that must be found and maintained.

These experimental studies offer perspectives to move forward from deliberating on possible future scenarios to defining a viable and shared territorial project that could help gradually reject an approach that is too often influenced by international cooperation, relies on highly sectoral public investment models, and is based on reproduction of existing models that ignore the local context (or the social, economic and institutional environment). The knowledge produced and the collaborative dynamics initiated thus make it possible to discuss and evaluate the effects of particular local policies, test their relevance and imagine alternatives. On this basis, it seems quite feasible to support development strategies that are local and territorial, participatory and multi-sectoral, and which take into account the capital of the territories in their diversity: economic and natural, but perhaps also human, social and cultural. However, their management and implementation will require an effective decentralization, and stakeholders will have to possess the human and financial resources to achieve it.

Beyond these concrete perspectives at the level of the transformation of the territories concerned, the territorial foresight approach based on a joint development of exploratory scenarios appears as a potentially innovative element in local governance. Indeed, it participates in a process of transforming administrative systems at the local level by affording the actors concerned with the means to become aware of their capacity for action both at the infra-territorial level as well as in their interactions at the national level. This approach thus contributes to the reflection on decentralization policies which, due to the choice of an administrative region as the study area, have been discussed at length in the experiments presented here. Territorial foresight not only offers opportunities for a better understanding of strategic planning in the context of territorial development, but it can also impart local actors with specific skills and a state of mind in sync with the expectations of decentralization.



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